



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/825,202	04/03/2001	John Potter	24,576-03	2696

7590 06/18/2004

John F. Klos, Esq.  
Filbright & Jaworski L.L.P.  
225 South Sixth Street  
Suite 4850  
Minneapolis, MN 55402-4320

EXAMINER

YIP, WINNIE S

ART UNIT	PAPER NUMBER
----------	--------------

3637

DATE MAILED: 06/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

ef

<b>Office Action Summary</b>	<b>Application No.</b> 09/825,202	<b>Applicant(s)</b> POTTER, JOHN	
	<b>Examiner</b> Winnie Yip	<b>Art Unit</b> 3637	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 September 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 and 13-44 is/are pending in the application.
- 4a) Of the above claim(s) 13-23 and 29-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11, 24-28 and 41-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
       Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
       Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

This is a first office action for a Request For Continued Examination application (RCE), filed September 11, 2003, of earlier application.

In regard to applicant's responses filed March 8, 2004 has been fully considered, the last office letter mailed February 20, 2004 is withdrawn, and applicant's amendment filed September 11, 2003 has been entered.

Notice claim 5 (as originally filed) is missed from applicant's amendment filed September 11, 2004. All claims must be listed even it has not be amended.

#### ***Claim Objections***

1. Claims 1, 4, and 44 are objected to because of the following informalities:

Regard to claims 1, 4, and 44, for a proper Markush group claim, the term "including: " should more properly read on "consisting of " . Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

2. Claims 4 and 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 4, the use of the trademark "KEVLAR" material has been noted in this application. It causes confusion as to the scope of claimed invention. The claim scope is uncertain since the trademark name KEVLAR cannot be used properly to identify any particular material or product. In fact, the value of a trademark would be lost to the extent that it became descriptive of a product, rather than used as an identification of a source or origin of a product.

Art Unit: 3637

Thus, the use of a trademark in a claim to identify or describe a material or product would not only render a claim indefinite, but would also constitute an improper use of the trademark.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Regard to claim 5, the “adhesive” of the group of composite materials of claim 5 does not appear to be a “composite material” for a panel. Clarification is required.

***Claim Rejections - 35 USC § 103***

3. Claims 1-7, 9-11, 24-28, and 41-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gaston (US Patent No. 5,493,825) in view of Padmanabhan et al. (US Patent No. 6,558,766).

Gaston discloses and teaches a deck structure being formed and comprising (see Figs. 1, 9, and 19): an underlying deck structure (10) including a plurality of vertical joists (22) disposed perpendicular to a plurality of horizontal joists (24), a plurality of modular building panels (172, 170) being placed in rows that span across at least two of vertical joists (22) (see Figs. 1 and 9), each building panel including an elongated element made of relatively inflexible material which substantially provides compressive strength and limited tensile strength such as wooden planks (see col. 4, line 27); each building panel including at least one groove (174, 176) extending along the edge of the panel, the building panel (170, 172) being placed upon at least two vertical joists (22), a spline (20 or 158) having a length substantially greater than a distance between an adjacent pair of vertical joists, the spline being generally aligned generally perpendicular to the vertical joists (22) and generally parallel to the horizontal joists (24), wherein one alternative

Art Unit: 3637

spline (158) may include two flanges (166, 168) being inserted into the grooves of adjacent pair of the panels for securing the panels on the joists. Gaston does not define the panels being made of two elements including the first element being made of inflexible material and the second element being made of fiber-reinforce composite material as claimed. Padmanabhan et al. teaches a floor decking structure comprising a plurality of panels each including a first element (16) made of inflexible material such as wooden tile (12) and a second element (17) made of fiber-reinforce composite material (FRP), wherein the first element (6), wooden tile (12), substantially provides compressive strength and limited tensile strength of the panel, said second element being adhesively disposed beneath the first elements, the first and second elements being generally planar and being equivalent in size, each panel having grooves at two opposite edges for engaging with adjacent panels. Padmanabhan et al. further teaches the fiber-reinforce composite material would include Kevlar or carbon fiber or fiberglass embedded in a polymeric resin such as epoxy (see col. 3, lines 13-34 and col. 4, lines 5-7, 16-24). It would have been obvious to one ordinary skill at the time the invention was made to modify the deck structure of Gaston being constructed by the panel being made of two layers including a second layer made of selected fiber-reinforced composite material being adhesively disposed beneath a first layer of inflexible material as taught by Padmanabhan et al. for improving the fatigue resistance of the wooden flooring and preventing moisture leakage to protect the wooden floor from the outside environment.

Regard to claim 11, although either Gaston or Padmanabhan et al. do not define the panels being generally square in shape, it would have been an obvious matter of design choice to a person of ordinary skill in the art, at the time the invention was made, to modify the floor

Art Unit: 3637

system of Gaston combined with Padmanabhan et al. having the panel being formed with variety in shape as to accommodate the arrangement of the joists for various applications since applicant has not disclosed that the panels having a particular cross-section provides an advantage, is used for a particular purpose, or solves a stated problem of deck structure. One of ordinary skill in the art, furthermore, would have expected applicant's invention to perform equally well to vary the shape of the panels of Gaston combined with Padmanabhan et al. such as a square in shape as claimed as depends upon where the joists will be positioned.

4. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gaston '825 in view of Padmanabhan et al. '766 as applied to claim 1 above, and further in view of Ott et al. (US Patent No. 4,945,697).

Although Padmanabhan et al. does not teach the panel may have the second element which is formed of fiber-reinforced composite material having a rib structure as claimed. Ott et al. teaches a elevated structure comprising a plurality of panels (10) each comprising a first element being made of inflexible material such as a concrete facing (12), and a second element (13) being made of resilient composite material, wherein the second element (13) having a rib structure (14) at the lower surface for providing drainage channels to allow moisture runs off the panel. It would have been obvious to one ordinary skit at the time the invention was made to modify the deck structure of Gaston in view of Padmanabhan et al. having the panels being made of the composite material of the lower element having a rib structure as taught by Ott et al. for providing the elevated structure with drainage to permit water runoff for improving waterproof of the structure.

***Response to Arguments***

5. Applicant's arguments with respect to claims 1-11, 24-28, and 41-44 under U.S.C. 102/103, and specifically to the feature for the spline element spans across more than two joists of the deck structure has been considered. This feature was not specifically and previously claimed in claims previously. Therefore, the argument is deemed to be moot in view of the new grounds of rejection.

***Citations***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Counihan '859, Huang '632, and Lam et al. '937 teach various deck panels comprising two layers as similar to the claimed invention. Menge '719, Faure '641, Coup '896, Lukens '936, and Cacossa '411 teach various building structures having a spline spanning across more than two joists for securing panels to the joists as similar to the claimed invention.

***Inquiry Contacts***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Winnie Yip whose telephone number is 703-308-2491. The examiner can normally be reached on M-F (9:30-6:30), Second Monday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on 703-308-2486. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3637

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Winnie Yip  
Primary Examiner  
Art Unit 3637

wsy  
June 10, 2004